#### REMARKS

Applicants respectfully request reconsideration and withdrawal of the outstanding objections and rejections, in light of the following remarks.

#### Status of Claims

Claims 1, 5 and 13 are pending for the Examiner's consideration.

For the reasons that follow, Applicants believe all Claims are now in condition for allowance.

## Rejection under 35 U.S.C. § 101

Claims 1, 5 and 13 were rejected under 35 U.S.C. § 101 as allegedly being not supported by either a specific and substantial asserted utility or a well established utility.

Applicants respectfully disagree. The present invention relates to a novel human patched-like protein (PTCH2) and shows its involvement into the PTCH/SHH cascade of signalling events. See, for example, paragraphs [0081]-[0083] of the originally-filed application. As a further evidence of a credible utility of the present invention, Applicants submit herewith a list of the scientific publications on PTCH2 by the inventors and others.

Applicants respectfully request that the rejection under 35 U.S.C. §101 be withdrawn.

#### Rejection under 35 U.S.C. § 112, first paragraph

Claims 1, 5 and 13 were rejected under 35 U.S.C. § 112, first paragraph, as allegedly not teaching one of ordinary skill in the art to use the invention commensurate in scope with the claims. For the reasons set forth below. Applicants respectfully traverse this rejection.

According to the M.P.E.P. §2164.07 I.A, "Office personnel should not impose a 35 U.S.C. 112, first paragraph rejection grounded on a "lack of utility" basis unless a 35 U.S.C. 101 rejection is proper." Here, the Office fails to establish a proper utility rejection. Accordingly, Applicants respectfully request that the rejection under 35 U.S.C. §112 be withdrawn.

# Rejection under 35 U.S.C. § 112, the first paragraph

Claims 1, 5 and 13 were rejected under 35 U.S.C. § 112, the first paragraph, as allegedly being not enabling. Applicants maintain that the specification is enabling for the same reasons of record in the previous Response to the August 17, 2006 Office Action. The present invention is a pioneering work that provides a basis for further scientific developments as shown, for example, in the scientific publications on PTCH2 by the inventors and others included in the attached list.

Applicants respectfully request that the rejection under 35 U.S.C. §112 be withdrawn. Conclusion

Applicants believe all claims are now in condition for allowance. Should there be any issues that have not been addressed to the Examiner's satisfaction, Applicants invite the Examiner to contact the undersigned attorney.

Applicants do not believe any fees are due in connection with this response. If any fees are due in connection with this response, please charge such fees to Deposit Account No. 161445.

Respectfully submitted,

Date: July 10, 2007 /Galina M. Yakovleva/

Galina M. Yakovleva, Ph.D. Attorney For Applicants Registration No. 47,192

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